

pyrazinyl;
 benzimidazolyl;
 benzothiazolyl;
 benzotriazolyl;
 5 naphthaloyl;
 quinolinyl;
 indolyl;
 thiadiazolyl;
 triazolyl;
 10 4-methylpiperidin-1-yl;
 4-methylpiperazin-1-yl;
 substituted phenyl;
 substituted benzyl;
 substituted pyridinyl;
 15 substituted pyrimidinyl;
 substituted pyrazinyl;
 substituted benzimidazolyl;
 substituted benzothiazolyl;
 substituted benzotriazolyl;
 20 substituted naphthaloyl;
 substituted quinolinyl;
 substituted indolyl;
 substituted thiadiazolyl;
 substituted triazolyl;
 25 substituted 4-methylpiperidin-1-yl; or
 substituted 4-methylpiperazin-1-yl,
 wherein the substituents are selected from one or more
 members of the group consisting of C₁₋₆alkyl,
 haloC₁₋₆alkyl, halogen, sulfonic acid, phosphonic acid,
 30 hydroxyl, carboxylic acid, amine, amidine,
 N-(2-aminopyrimidine)sulfonyl,

N-(aminopyridine)sulfonyl, N-(aminopyrazine)sulfonyl,
 N-(2-aminopyrimidine)carbonyl,
 N-(aminopyridine)carbonyl, N-(aminopyrazine)carbonyl,
 N-(2-aminopyrimidine)phosphonyl,
 5 N-(2-aminopyridine)phosphonyl,
 N-(aminopyrazine)phosphonyl,
 N-(aminobenzimidazolyl)sulfonyl,
 N-(aminobenzothiazolyl)sulfonyl,
 N-(aminobenzotriazolyl)sulfonyl,
 10 N-(aminoindolyl)sulfonyl, N-(aminothiazolyl)sulfonyl,
 N-(aminotriazolyl)sulfonyl,
 N-(amino-4-methylpiperidinyl)sulfonyl,
 N-(amino-4-methylpiperazinyl)sulfonyl,
 N-(aminobenzimidazolyl)carbonyl,
 15 N-(aminobenzothiazolyl)carbonyl,
 N-(aminobenzotriazolyl)carbonyl,
 N-(aminoindolyl)carbonyl, N-(aminothiazolyl)carbonyl,
 N-(aminotriazolyl)carbonyl,
 N-(amino-4-methylpiperidinyl)carbonyl,
 20 N-(amino-4-methylpiperazinyl)carbonyl,
 N-(2-aminobenzimidazolyl)phosphonyl,
 N-(2-aminobenzothiazolyl)phosphonyl,
 N-(2-aminobenzotriazolyl)phosphonyl,
 N-(2-aminoindolyl)phosphonyl,
 25 N-(2-aminothiazolyl)phosphonyl,
 N-(2-aminotriazolyl)phosphonyl,
 N-(amino-4-methylpiperidinyl) phosphonyl,
 N-(amino-4-methylpiperazinyl) phosphonyl, acetamide,
 nitrile, thiol, C₁₋₆alkyldisulfide, C₁₋₆alkylsulfide, phenyl
 30 disulfide, urea, C₁₋₆alkylurea, phenylurea, thiourea,
 C₁₋₆alkylthiourea, phenylthiourea, substituted

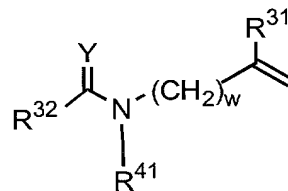
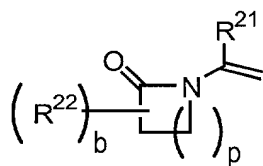
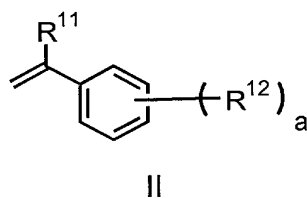
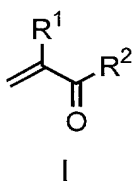
C₁₋₆alkyldisulfide, substituted phenyldisulfide,
substituted C₁₋₆alkylurea, substituted C₁₋₆alkylthiourea,
substituted phenylurea, and substituted phenylthiourea
wherein the C₁₋₆alkyldisulfide, phenyldisulfide,
C₁₋₆alkylurea, C₁₋₆alkylthiourea, phenylurea, and
phenylthiourea substituents are selected from the
group consisting of C₁₋₆alkyl, haloC₁₋₆alkyl, halogen,
hydroxyl, carboxylic acid, sulfonic acid, phosphonic
acid, amine, amidine, acetamide, and nitrile;

R⁴¹ is hydrogen, C₁₋₆alkyl, phenyl, C₁₋₆alkylcarbonyl, phenylcarbonyl,
substituted C₁₋₆alkyl, substituted phenyl, substituted C₁₋₆alkylcarbonyl
or substituted phenylcarbonyl,

wherein

the substituents are selected from the group consisting of
C₁₋₆alkyl, haloC₁₋₆alkyl, halogen, hydroxyl, carboxylic acid,
sulfonic acid, phosphonic acid, amine, amidine, acetamide,
and nitrile.

63. A method of reducing the adverse effects associated with microbial
production in the eye of a mammal comprising providing an antimicrobial
lens, wherein said lens comprises, silver and a polymer comprising a
monomer of the Formula I, II, III or IV



wherein

R^1 is hydrogen or C_{1-6} alkyl;

R^2 is $-OR^3$, $-NH-R^3$, $-S-(CH_2)_d-R^3$, or $-(CH_2)_d-R^3$, wherein

d is 0-8;

R^3 is substituted C_{1-6} alkyl

where the alkyl substituents are selected from one or more members of the group consisting of carboxylic acid, sulfonic acid, phosphonic acid, amine, amidine, acetamide, nitrile, thiol, C_{1-6} alkyldisulfide, C_{1-6} alkylsulfide, phenyldisulfide, urea, C_{1-6} alkylurea, phenylurea, thiourea, C_{1-6} alkylthiourea, phenylthiourea, substituted C_{1-6} alkyldisulfide, substituted phenyldisulfide, substituted C_{1-6} alkylurea, substituted phenylurea, substituted C_{1-6} alkylthiourea, and substituted phenylthiourea

wherein the C_{1-6} alkyldisulfide, phenyldisulfide, C_{1-6} alkylurea, C_{1-6} alkylthiourea, phenylurea, and phenylthiourea substituents are selected from the group consisting of C_{1-6} alkyl, halo C_{1-6} alkyl, halogen, hydroxyl, carboxylic acid, sulfonic acid, phosphonic acid, amine, amidine, acetamide, and nitrile;

$-(CR^4R^5)_q-(CHR^6)_m-SO_3H$

wherein R^4 , R^5 , and R^6 are independently selected from the group consisting of hydrogen, halogen, hydroxyl, and C_{1-6} alkyl,

q is 1-6, and

m is 0-6;

$-(CH_2)_n-S-S-(CH_2)_x-NH-C(O)CR^7CH_2$,

wherein R^7 is hydrogen or C_{1-6} alkyl,

n is 1-6, and

x is 1-6;

$-(CR^8R^9)_t-(CHR^{10})_u-P(O)(OH)_2$

wherein R^8 , R^9 , and R^{10} are independently selected

from the group consisting of hydrogen, halogen,
hydroxyl, and C_{1-6} alkyl,

t is 1-6, and

u is 0-6;

phenyl;

benzyl;

pyridinyl;

pyrimidinyl;

pyrazinyl;

benzimidazolyl;

benzothiazolyl;

benzotriazolyl;

naphthaloyl;

quinolinyl;

indolyl;

thiadiazolyl;

triazolyl;

4-methylpiperidin-1-yl;

4-methylpiperazin-1-yl;

substituted phenyl;

substituted benzyl;

substituted pyridinyl;

substituted pyrimidinyl;

substituted pyrazinyl;

substituted benzimidazolyl;

substituted benzothiazolyl;

substituted benzotriazolyl;

substituted naphthaloyl;
substituted quinolinyl;
substituted indolyl;
substituted thiadiazolyl;
substituted triazolyl;
substituted 4-methylpiperidin-1-yl; or
substituted 4-methylpiperazin-1-yl,

wherein the substituents are selected from one or more
members of the group consisting of C₁₋₆alkyl,
haloC₁₋₆alkyl, halogen, sulfonic acid, phosphonic acid,
hydroxyl, carboxylic acid, amine, amidine,
N-(2-aminopyrimidine)sulfonyl,
N-(aminopyridine)sulfonyl, N-(aminopyrazine)sulfonyl,
N-(2-aminopyrimidine)carbonyl,
N-(aminopyridine)carbonyl, N-(aminopyrazine)carbonyl,
N-(2-aminopyrimidine)phosphonyl,
N-(2-aminopyridine)phosphonyl,
N-(aminopyrazine)phosphonyl,
N-(aminobenzimidazolyl)sulfonyl,
N-(aminobenzothiazolyl)sulfonyl,
N-(aminobenzotriazolyl)sulfonyl,
N-(aminoindolyl)sulfonyl, N-(aminothiazolyl)sulfonyl,
N-(aminotriazolyl)sulfonyl,
N-(amino-4-methylpiperidinyl)sulfonyl,
N-(amino-4-methylpiperazinyl)sulfonyl,
N-(aminobenzimidazolyl)carbonyl,
N-(aminobenzothiazolyl)carbonyl,
N-(aminobenzotriazolyl)carbonyl,
N-(aminoindolyl)carbonyl, N-(aminothiazolyl)carbonyl,
N-(aminotriazolyl)carbonyl,
N-(amino-4-methylpiperidinyl)carbonyl,

N-(amino-4-methylpiperazinyl)carbonyl,
 N-(2-aminobenzimidazolyl)phosphonyl,
 N-(2-aminobenzothiazolyl)phosphonyl,
 N-(2-aminobenzotriazolyl)phosphonyl,
 N-(2-aminoindolyl)phosphonyl,
 N-(2-aminothiazolyl)phosphonyl,
 N-(2-aminotriazolyl)phosphonyl,
 N-(amino-4-methylpiperidinyl) phosphonyl,
 N-(amino-4-methylpiperazinyl) phosphonyl, acetamide,
 nitrile, thiol, C₁₋₆alkyldisulfide, C₁₋₆alkylsulfide, phenyl
 disulfide, urea, C₁₋₆alkylurea, phenylurea, thiourea,
 C₁₋₆alkylthiourea, phenylthiourea, substituted
 C₁₋₆alkyldisulfide, substituted phenyldisulfide,
 substituted C₁₋₆alkylurea, substituted C₁₋₆alkylthiourea,
 substituted phenylurea, and substituted phenylthiourea
 wherein the C₁₋₆alkyldisulfide, phenyldisulfide,
 C₁₋₆alkylurea, C₁₋₆alkylthiourea, phenylurea, and
 phenylthiourea substituents are selected from the
 group consisting of C₁₋₆alkyl, haloC₁₋₆alkyl, halogen,
 hydroxyl, carboxylic acid, sulfonic acid, phosphonic
 acid, amine, amidine, acetamide, and nitrile;

a is 1-5;

R¹¹ is hydrogen or C₁₋₆alkyl;

R¹² is hydroxyl, sulfonic acid, phosphonic acid, carboxylic acid,
 acetamide, thioC₁₋₆alkylcarbonyl, C₁₋₆alkyldisulfide, C₁₋₆alkylsulfide,
 phenyl disulfide, urea, C₁₋₆alkylurea, phenylurea, thiourea,
 C₁₋₆alkylthiourea, phenylthiourea, -OR¹³, -NH-R¹³, -S-(CH₂)_d-R¹³,
 -(CH₂)_d-R¹³, -C(O)NH--(CH₂)_d-R¹³, -C(O) -(CH₂)_d-R¹³, substituted
 C₁₋₆alkyldisulfide, substituted phenyldisulfide, substituted C₁₋₆alkylurea,
 substituted phenylurea, substituted phenylthiourea or substituted
 C₁₋₆alkylthiourea wherein the substituents are selected from the group

consisting of C₁₋₆alkyl, haloC₁₋₆alkyl, halogen, hydroxyl, carboxylic acid, sulfonic acid, phosphonic acid, amine, amidine, acetamide, and nitrile;

where

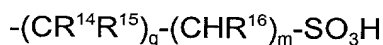
d is 0-8;

R¹³ is thioC₁₋₆alkylcarbonyl;

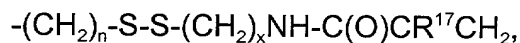
substituted C₁₋₆alkyl

where the alkyl substituents are selected from one or more members of the group consisting of hydroxyl, carboxylic acid, sulfonic acid, phosphonic acid, amine, amidine, acetamide, nitrile, thiol, C₁₋₆alkyldisulfide, C₁₋₆alkylsulfide, phenyldisulfide, urea, C₁₋₆alkylurea, phenylurea, thiourea, C₁₋₆alkylthiourea, phenylthiourea, substituted C₁₋₆alkyldisulfide, substituted phenyldisulfide, substituted C₁₋₆alkylurea, substituted phenylurea, substituted C₁₋₆alkylthiourea and substituted phenylthiourea

wherein the C₁₋₆alkyldisulfide, phenyldisulfide, C₁₋₆alkylurea, C₁₋₆alkylthiourea, phenylurea, and phenylthiourea substituents are selected from the group consisting of C₁₋₆alkyl, haloC₁₋₆alkyl, halogen, hydroxyl, carboxylic acid, sulfonic acid, phosphonic acid, amine, amidine, acetamide, and nitrile;



where R¹⁴, R¹⁵, and R¹⁶ are independently selected from the group consisting of hydrogen, halogen, hydroxyl, and C₁₋₆alkyl, q is 1-6, and m is 0-6;



where R¹⁷ is hydrogen or C₁₋₆alkyl, n is 1-6, and

x is 1-6;



where R^{18} , R^{19} , and R^{20} are independently selected

from the group consisting of hydrogen, halogen,

hydroxyl, and C_{1-6} alkyl,

t is 1-6, and

u is 0-6;

phenyl;

benzyl;

pyridinyl;

pyrimidinyl;

pyrazinyl;

benzimidazolyl;

benzothiazolyl;

benzotriazolyl;

naphthaloyl;

quinolinyl;

indolyl;

thiadiazolyl;

triazolyl;

4-methylpiperidin-1-yl;

4-methylpiperazin-1-yl;

substituted phenyl;

substituted benzyl;

substituted pyridinyl;

substituted pyrimidinyl;

substituted pyrazinyl;

substituted benzimidazolyl;

substituted benzothiazolyl;

substituted benzotriazolyl;

substituted naphthaloyl;

substituted quinolinyl;
substituted indolyl;
substituted thiadiazolyl;
substituted triazolyl;
5 substituted 4-methylpiperidin-1-yl; or
substituted 4-methylpiperazin-1-yl

wherein the substituents are selected from one or more
members of the group consisting of C₁₋₆alkyl,
haloC₁₋₆alkyl, halogen, sulfonic acid, phosphonic acid,
10 hydroxyl, carboxylic acid, amine, amidine,
N-(2-aminopyrimidine)sulfonyl,
N-(aminopyridine)sulfonyl, N-(aminopyrazine)sulfonyl,
N-(2-aminopyrimidine)carbonyl,
N-(aminopyridine)carbonyl, N-(aminopyrazine)carbonyl,
15 N-(2-aminopyrimidine)phosphonyl,
N-(2-aminopyridine)phosphonyl,
N-(aminopyrazine)phosphonyl,
N-(aminobenzimidazolyl)sulfonyl,
N-(aminobenzothiazolyl)sulfonyl,
20 N-(aminobenzotriazolyl)sulfonyl,
N-(aminoindolyl)sulfonyl, N-(aminothiazolyl)sulfonyl,
N-(aminotriazolyl)sulfonyl,
N-(amino-4-methylpiperidinyl)sulfonyl,
N-(amino-4-methylpiperazinyl)sulfonyl,
25 N-(aminobenzimidazolyl)carbonyl,
N-(aminobenzothiazolyl)carbonyl,
N-(aminobenzotriazolyl)carbonyl,
N-(aminoindolyl)carbonyl, N-(aminothiazolyl)carbonyl,
N-(aminotriazolyl)carbonyl,
30 N-(amino-4-methylpiperidinyl)carbonyl,
N-(amino-4-methylpiperazinyl)carbonyl,

N-(2-aminobenzimidazolyl)phosphonyl,
 N-(2-aminobenzothiazolyl)phosphonyl,
 N-(2-aminobenzotriazolyl)phosphonyl,
 N-(2-aminoindolyl)phosphonyl,
 N-(2-aminothiazolyl)phosphonyl,
 N-(2-aminotriazolyl)phosphonyl,
 N-(amino-4-methylpiperidiny) phosphonyl,
 N-(amino-4-methylpiperaziny) phosphonyl, acetamide,
 nitrile, thiol, C₁₋₆alkyldisulfide, C₁₋₆alkylsulfide, phenyl
 disulfide, urea, C₁₋₆alkylurea, phenylurea, thiourea,
 C₁₋₆alkylthiourea, phenylthiourea, substituted
 C₁₋₆alkyldisulfide, substituted phenyldisulfide,
 substituted C₁₋₆alkylurea, substituted C₁₋₆alkylthiourea,
 substituted phenylurea, and substituted phenylthiourea
 wherein the C₁₋₆alkyldisulfide, phenyldisulfide,
 C₁₋₆alkylurea, C₁₋₆alkylthiourea, phenylurea, and
 phenylthiourea substituents are selected from the
 group consisting of C₁₋₆alkyl, haloC₁₋₆alkyl, halogen,
 hydroxyl, carboxylic acid, sulfonic acid, phosphonic
 acid, amine, amidine, acetamide, and nitrile;

b is 1-5;

p is 1-5;

R²¹ is hydrogen;

R²² is hydroxyl, sulfonic acid, phosphonic acid, carboxylic acid,

thioC₁₋₆alkylcarbonyl, thioC₁₋₆alkylaminocarbonyl, C₁₋₆alkyldisulfide,
 phenyldisulfide, -C(O)NH(CH₂)₁₋₆-SO₃H, -C(O)NH(CH₂)₁₋₆-P(O)(OH)₂,
 -OR²³, -NH-R²³, -C(O)NH-(CH₂)_d-R²³, -S-(CH₂)_d-R²³, -(CH₂)_d-R²³, urea,

C₁₋₆alkylurea, phenylurea, thiourea, C₁₋₆alkylthiourea, phenylthiourea,
 substituted C₁₋₆alkyldisulfide, substituted phenyldisulfide, substituted
 C₁₋₆alkylurea, substituted, C₁₋₆alkylthiourea substituted phenylurea or
 substituted phenylthiourea wherein the substituents are selected from

the group consisting of C₁₋₆alkyl, haloC₁₋₆alkyl, halogen, hydroxyl, carboxylic acid, sulfonic acid, phosphonic acid, amine, amidine, acetamide, and nitrile,

where

d is 0-8;

R²³ is thioC₁₋₆alkylcarbonyl,

C₁₋₆alkyl,

substituted C₁₋₆alkyl

where the alkyl substituents are selected from one or more members of the group consisting of C₁₋₆alkyl, haloC₁₋₆alkyl, halogen, hydroxyl, carboxylic acid, sulfonic acid, phosphonic acid, amine, amidine, acetamide, nitrile, thiol, C₁₋₆alkyldisulfide, C₁₋₆alkylsulfide, phenyldisulfide, urea, C₁₋₆alkylurea, phenylurea, thiourea, C₁₋₆alkylthiourea, phenylthiourea, substituted C₁₋₆alkyldisulfide, substituted phenyldisulfide, substituted C₁₋₆alkylurea, substituted phenylurea, substituted C₁₋₆alkylthiourea, and substituted phenylthiourea

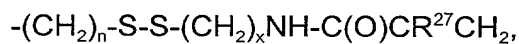
wherein the C₁₋₆alkyldisulfide, phenyldisulfide, C₁₋₆alkylurea, C₁₋₆alkylthiourea, phenylurea, and phenylthiourea substituents are selected from the group consisting of C₁₋₆alkyl, haloC₁₋₆alkyl, halogen, hydroxyl, carboxylic acid, sulfonic acid, phosphonic acid, amine, amidine, acetamide, and nitrile;

$-(\text{CR}^{24}\text{R}^{25})_q-(\text{CHR}^{26})_m-\text{SO}_3\text{H}$

where R²⁴, R²⁵, and R²⁶ are independently selected from the group consisting of hydrogen, halogen, hydroxyl, and C₁₋₆alkyl,

q is 1-6, and

m is 0-6



where R^{27} is hydrogen or C_{1-6} alkyl,

n is 1-6, and

x is 1-6;



where R^{28} , R^{29} , and R^{30} are independently selected

from the group consisting of hydrogen, halogen,

hydroxyl, and C_{1-6} alkyl,

t is 1-6, and

u is 0-6;

phenyl;

benzyl;

pyridinyl;

pyrimidinyl;

pyrazinyl;

benzimidazolyl;

benzothiazolyl;

benzotriazolyl;

naphthaloyl;

quinolinyl;

indolyl;

thiadiazolyl;

triazolyl;

4-methylpiperidin-1-yl;

4-methylpiperazin-1-yl;

substituted phenyl;

substituted benzyl;

substituted pyridinyl;

substituted pyrimidinyl;

substituted pyrazinyl;

substituted benzimidazolyl;

substituted benzothiazolyl;
substituted benzotriazolyl;
substituted naphthaloyl;
substituted quinolinyl;
substituted indolyl;
substituted thiadiazolyl;
substituted triazolyl;
substituted 4-methylpiperidin-1-yl; or
substituted 4-methylpiperazin-1-yl,

wherein the substituents are selected from one or more members of the group consisting of C₁₋₆alkyl, haloC₁₋₆alkyl, halogen, sulfonic acid, phosphonic acid, hydroxyl, carboxylic acid, amine, amidine, N-(2-aminopyrimidine)sulfonyl, N-(aminopyridine)sulfonyl, N-(aminopyrazine)sulfonyl, N-(2-aminopyrimidine)carbonyl, N-(aminopyridine)carbonyl, N-(aminopyrazine)carbonyl, N-(2-aminopyrimidine)phosphonyl, N-(2-aminopyridine)phosphonyl, N-(aminopyrazine)phosphonyl, N-(aminobenzimidazolyl)sulfonyl, N-(aminobenzothiazolyl)sulfonyl, N-(aminobenzotriazolyl)sulfonyl, N-(aminoindolyl)sulfonyl, N-(aminothiazolyl)sulfonyl, N-(aminotriazolyl)sulfonyl, N-(amino-4-methylpiperidinyl)sulfonyl, N-(amino-4-methylpiperazinyl)sulfonyl, N-(aminobenzimidazolyl)carbonyl, N-(aminobenzothiazolyl)carbonyl, N-(aminobenzotriazolyl)carbonyl, N-(aminoindolyl)carbonyl, N-(aminothiazolyl)carbonyl,

N-(aminotriazolyl)carbonyl,
 N-(amino-4-methylpiperidiny)carbonyl,
 N-(amino-4-methylpiperazinyl)carbonyl,
 N-(2-aminobenzimidazolyl)phosphonyl,
 N-(2-aminobenzothiazolyl)phosphonyl,
 N-(2-aminobenzotriazolyl)phosphonyl,
 N-(2-aminoindolyl)phosphonyl,
 N-(2-aminothiazolyl)phosphonyl,
 N-(2-aminotriazolyl)phosphonyl,
 N-(amino-4-methylpiperidiny) phosphonyl,
 N-(amino-4-methylpiperazinyl) phosphonyl, acetamide,
 nitrile, thiol, C₁₋₆alkyldisulfide, C₁₋₆alkylsulfide, phenyl
 disulfide, urea, C₁₋₆alkylurea, phenylurea, thiourea,
 C₁₋₆alkylthiourea, phenylthiourea, substituted
 C₁₋₆alkyldisulfide, substituted phenyldisulfide,
 substituted C₁₋₆alkylurea, substituted C₁₋₆alkylthiourea,
 substituted phenylurea, and substituted phenylthiourea
 wherein the C₁₋₆alkyldisulfide, phenyldisulfide,
 C₁₋₆alkylurea, C₁₋₆alkylthiourea, phenylurea, and
 phenylthiourea substituents are selected from the
 group consisting of C₁₋₆alkyl, haloC₁₋₆alkyl, halogen,
 hydroxyl, carboxylic acid, sulfonic acid, phosphonic
 acid, amine, amidine, acetamide, and nitrile;

w is 0-1;

Y is oxygen or sulfur;

R³¹ is hydrogen or C₁₋₆alkyl;

R³² is hydroxyl, sulfonic acid, phosphonic acid, carboxylic acid,
 thioC₁₋₆alkylcarbonyl, thioC₁₋₆alkylaminocarbonyl, -C(O)NH-(CH₂)_d-R³³,
 -O-R³³, -NH-R³³, -S-(CH₂)_d-R³³, -(CH₂)_d-R³³, C₁₋₆alkyldisulfide,
 phenyldisulfide, urea, C₁₋₆alkylurea, phenylurea, thiourea,
 C₁₋₆alkylthiourea, phenylthiourea, C₁₋₆alkylamine, phenylamine,

substituted C₁₋₆alkyldisulfide, substituted phenyldisulfide, substituted phenylurea, substituted C₁₋₆alkylamine, substituted phenylamine, substituted phenylthiourea, substituted C₁₋₆alkylurea or substituted C₁₋₆alkylthiourea wherein the substituents are selected from the group consisting of C₁₋₆alkyl, haloC₁₋₆alkyl, halogen, hydroxyl, carboxylic acid, sulfonic acid, phosphonic acid, amine, amidine, acetamide, and nitrile where

d is 0-8;

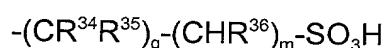
R³³ is thioC₁₋₆alkylcarbonyl,

C₁₋₆alkyl,

substituted C₁₋₆alkyl

where the alkyl substituents are selected from one or more members of the group consisting of C₁₋₆alkyl, halo C₁₋₆alkyl, halogen, hydroxyl, carboxylic acid, sulfonic acid, phosphonic acid, amine, amidine, acetamide, nitrile, thiol, C₁₋₆alkyldisulfide, C₁₋₆alkylsulfide, phenyldisulfide, urea, C₁₋₆alkylurea, phenylurea, thiourea, C₁₋₆alkylthiourea, phenylthiourea, substituted C₁₋₆alkyldisulfide, substituted phenyldisulfide, substituted C₁₋₆alkylurea, substituted phenylurea, substituted C₁₋₆alkylthiourea or substituted phenylthiourea

wherein the C₁₋₆alkyldisulfide, phenyldisulfide, C₁₋₆alkylurea, C₁₋₆alkylthiourea, phenylurea, and phenylthiourea substituents are selected from the group consisting of C₁₋₆alkyl, haloC₁₋₆alkyl, halogen, hydroxyl, carboxylic acid, sulfonic acid, phosphonic acid, amine, amidine, acetamide, and nitrile;



where R^{34} , R^{35} , and R^{36} are independently selected from the group consisting of hydrogen, halogen, hydroxyl, and C_{1-6} alkyl,

q is 1-6, and

m is 0-6;

$-(CH_2)_n-S-S-(CH_2)_x-NH-C(O)CR^{37}CH_2$,

where R^{37} is hydrogen or C_{1-6} alkyl,

n is 1-6, and

x is 1-6;

$-(CR^{38}R^{39})_t-(CHR^{40})_u-P(O)(OH)_2$

where R^{38} , R^{39} , and R^{40} are independently selected from the group consisting of hydrogen, halogen,

hydroxyl, and C_{1-6} alkyl,

t is 1-6, and

u is 0-6;

phenyl;

benzyl;

pyridinyl;

pyrimidinyl;

pyrazinyl;

benzimidazolyl;

benzothiazolyl;

benzotriazolyl;

naphthaloyl;

quinolinyl;

indolyl;

thiadiazolyl;

triazolyl;

4-methylpiperidin-1-yl;

4-methylpiperazin-1-yl;

substituted phenyl;

substituted benzyl;
substituted pyridinyl;
substituted pyrimidinyl;
substituted pyrazinyl;
substituted benzimidazolyl;
substituted benzothiazolyl;
substituted benzotriazolyl;
substituted naphthaloyl;
substituted quinolinyl;
substituted indolyl;
substituted thiadiazolyl;
substituted triazolyl;
substituted 4-methylpiperidin-1-yl; or
substituted 4-methylpiperazin-1-yl,

wherein the substituents are selected from one or more members of the group consisting of C₁₋₆alkyl, haloC₁₋₆alkyl, halogen, sulfonic acid, phosphonic acid, hydroxyl, carboxylic acid, amine, amidine, N-(2-aminopyrimidine)sulfonyl, N-(aminopyridine)sulfonyl, N-(aminopyrazine)sulfonyl, N-(2-aminopyrimidine)carbonyl, N-(aminopyridine)carbonyl, N-(aminopyrazine)carbonyl, N-(2-aminopyrimidine)phosphonyl, N-(2-aminopyridine)phosphonyl, N-(aminopyrazine)phosphonyl, N-(aminobenzimidazolyl)sulfonyl, N-(aminobenzothiazolyl)sulfonyl, N-(aminobenzotriazolyl)sulfonyl, N-(aminoindolyl)sulfonyl, N-(aminothiazolyl)sulfonyl, N-(aminotriazolyl)sulfonyl, N-(amino-4-methylpiperidinyl)sulfonyl,

N-(amino-4-methylpiperazinyl)sulfonyl,
 N-(aminobenzimidazolyl)carbonyl,
 N-(aminobenzothiazolyl)carbonyl,
 N-(aminobenzotriazolyl)carbonyl,
 N-(aminoindolyl)carbonyl, N-(aminothiazolyl)carbonyl,
 N-(aminotriazolyl)carbonyl,
 N-(amino-4-methylpiperidinyl)carbonyl,
 N-(amino-4-methylpiperazinyl)carbonyl,
 N-(2-aminobenzimidazolyl)phosphonyl,
 N-(2-aminobenzothiazolyl)phosphonyl,
 N-(2-aminobenzotriazolyl)phosphonyl,
 N-(2-aminoindolyl)phosphonyl,
 N-(2-aminothiazolyl)phosphonyl,
 N-(2-aminotriazolyl)phosphonyl,
 N-(amino-4-methylpiperidinyl) phosphonyl,
 N-(amino-4-methylpiperazinyl) phosphonyl, acetamide,
 nitrile, thiol, C₁₋₆alkyldisulfide, C₁₋₆alkylsulfide, phenyl
 disulfide, urea, C₁₋₆alkylurea, phenylurea, thiourea,
 C₁₋₆alkylthiourea, phenylthiourea, substituted
 C₁₋₆alkyldisulfide, substituted phenyldisulfide,
 substituted C₁₋₆alkylurea, substituted C₁₋₆alkylthiourea,
 substituted phenylurea, and substituted phenylthiourea
 wherein the C₁₋₆alkyldisulfide, phenyldisulfide,
 C₁₋₆alkylurea, C₁₋₆alkylthiourea, phenylurea, and
 phenylthiourea substituents are selected from the
 group consisting of C₁₋₆alkyl, haloC₁₋₆alkyl, halogen,
 hydroxyl, carboxylic acid, sulfonic acid, phosphonic
 acid, amine, amidine, acetamide, and nitrile;

R⁴¹ is hydrogen, C₁₋₆alkyl, phenyl, C₁₋₆alkylcarbonyl, phenylcarbonyl,
 substituted C₁₋₆alkyl, substituted phenyl, substituted C₁₋₆alkylcarbonyl
 or substituted phenylcarbonyl,

wherein

the substituents are selected from the group consisting of
C₁₋₆alkyl, haloC₁₋₆alkyl, halogen, hydroxyl, carboxylic acid,
sulfonic acid, phosphonic acid, amine, amidine, acetamide,
and nitrile.

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64. An antimicrobial lens comprising silver, wherein said lens has sufficient movement on the eye of a patient.

10 65. The lens of claim 64 having about 50 to about 100 percent movement.

66. The lens of claim 64 having about 75 to about 100 percent movement.

67. The lens of claim 64 having about 90 to about 100 percent movement.

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68. An antimicrobial lens comprising silver, wherein said lens inhibits microbial production by at least 25%.

69. The lens of claim 68 wherein said lens inhibits microbial production by at least about 50% to at least about 99%.

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70. The lens of claim 68 wherein said lens inhibits microbial production by at least about 80% to at least about 99%.

25 71. An antimicrobial lens comprising silver, wherein said lens has sufficient movement on the eye of a patient and said lens inhibits microbial production by at least 25%.

72. The lens of claim 71 having about 50% to about 100% movement and said lens inhibits microbial production by 75% to about 100%.

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